

Preface

A funny thing happened on my way to Tranquillity Base. I suppose I could call it a revelation. This book, provisionally titled *One Giant Leap*, was originally intended as an antidote to my last book, *The Bomb: A Life*. Writing about nuclear weapons left me depressed, cynical, forlorn, and scared. After that experience, I craved something hopeful and uplifting and therefore looked to my childhood for a good wholesome story to retell. I decided to write a book about the heroes of my youth—the astronauts who took America to the Moon. I suppose that’s self-indulgent, but I didn’t care. I’d earned it after doing time with the Bomb.

When I started looking at the lunar program, I found heroes aplenty. But I also found a gang of cynics, manipulators, demagogues, tyrants, and even a few criminals. I discovered scheming politicians who amassed enormous power by playing on the public fascination for space and the fear of what the Russians might do there. Quite a few people got rich from the lunar mission; some got very rich indeed. The Moon mission was sold as a race that America could not afford to lose—a struggle for survival. Landing on the Moon, it was argued, would bring enormous benefit to all mankind. It would be good for the economy, for politics, and for the soul. It would, some argued, even end war.

Referring to the shallow nature of the *Apollo 11* coverage on television and in newspapers, Edwin Diamond, a senior editor at *Newsweek*, wrote, a short time after the launch:

Little of the flesh and blood vitality—and human frailties—of the past decade of the American space venture were offered. . . . Among the missing stories, to take only the most obvious examples, were the Cold War beginnings of the space program; John F. Kennedy’s search for a space spectacular “that the U.S. could win”; the spurious nature of the “Moon race” with the Russians (we raced only ourselves); the separate fiefdoms and the abrasive clash of personalities in NASA; the logrolling politics of space appropriations and decisions that put the

Manned Spacecraft Center in Texas and other installations in Louisiana and Massachusetts; the shoddy workmanship of some of the biggest U.S. firms and the slipshod Government management procedures that led to the death of three astronauts—in short, the full, as opposed to the official story of Apollo.¹

This book provides those missing stories and some others Diamond did not know about back in 1969. My aim has been to cut through the myths carefully constructed by the Kennedy and Johnson administrations and sustained by NASA ever since.

The popularity of space stories is perhaps understandable. We all love heroes, we all enjoy a great adventure. While we no longer travel to the Moon, we still travel nostalgically to that era when the Moon made us feel good. For many of us who remember the sixties, Apollo represents a safe harbor in a sea of cynicism, violence, and despair.

Myths are, however, dangerous, especially when they're used to manipulate contemporary opinion. NASA still cashes in on the glories of forty years ago. The problems of the space program today, for instance that of the underperforming and sometimes dangerous Space Shuttle, can be traced back to decisions made in the 1960s, in particular the misguided emphasis upon manned space travel. Putting men in space was an immensely expensive distraction of little scientific or cultural worth. The American people, in other words, were fleeced: they were persuaded to spend \$35 billion on an ego trip to the Moon, and then were told that a short step on the desolate lunar landscape was a giant leap for mankind.*

The ground rules of the space race were set the moment the Russians stuffed a poor little dog into a space capsule on November 3, 1957. From that point forward, only those achievements carried out by living, breathing things really mattered. The Russians might have set the terms of the race, but the Americans gladly went along, because they understood that the contest would only capture the public imagination if it were turned into a human adventure. The early space pioneers, Wern-

* Estimating the cost of the mission to the Moon is nearly impossible given the difficulty in deciding what to count. Simply adding up NASA yearly budgets would be wrong, since not all the money went toward the task of a Moon landing. The figure of \$35 billion is at the top end of estimates but still widely accepted by most analysts. The sharp-eyed reader will notice different figures quoted at various points in this book, as a result of differences of opinion among those being quoted.

her von Braun foremost among them, played to this egotism. He realized that the only way to get money to fund his dreams was if space had a face. No bucks without Buck Rogers.*

Exploration could have been carried out by robots, but robots could never be heroes. Yet putting men into the capsules added huge complexities to the space equation. It meant that every voyage had to be a round trip, and that sophisticated life support systems had to be added to cater to the astronaut's bodily needs. The capsules had to be not just laboratories, but also toilets, kitchens, and bedrooms. The air had to be pure, the water clean, and the climate warm. All this severely limited what could be explored. Robots can easily travel to the far reaches of the solar system, while men can't make it beyond Mars and certainly can't land on Venus.

Expressed in the terms set by the Soviets and the Americans, the lunar race was shallow and trivial. The two superpowers behaved like two bald men fighting over a comb. The Moon became the target, not because it was important, but because it was there. It was far away, threatening and mysterious, but still close and familiar enough to make a journey possible. By mutual agreement, it became the finish line in the space race. What was important was not what the first explorers might find, but rather that they were there at all. The limited nature of this endeavor explains why the American space program has been caught in a state of purposeless wandering ever since Neil Armstrong set foot on the Moon. No one knew what to do next, because the only goal that had ever mattered had been achieved.

When Armstrong and Buzz Aldrin landed on the Moon, the Soviet premier Leonid Brezhnev congratulated the brave astronauts who, he said, had overcome the limitations of their machinery. Americans at the time thought the comment churlish but, in retrospect, it seems remarkably perceptive. Scientists and engineers stretched available technology as far as it could possibly go, thus allowing the mission to proceed much earlier than logic or caution should have allowed. Lives were risked—nearly every mission came close to catastrophe. Going to the Moon was not just a supreme technological achievement, it was also a magnificent artistic endeavor, requiring huge reserves of imagination, faith, and bravery. But all that sublime effort was devoted toward a stunt that had no real purpose other than to kick lunar dust in Soviet

* A phrase used many times, including by Tom Wolfe.

faces. The mission was a brilliant deception, a glorious swindle—"magnificent desolation."^{*}

Those who look to history for heroes will find this book disappointing, but I make no apologies for this exclusion. From the glory days of Mercury to the present sad era of the Space Shuttle, NASA has cashed in on the American public's willingness to indulge a fantasy of manned space exploration. Space agency self-interest has been marketed as a national good, and at times as the greatest hope for mankind. It is time that we shield ourselves from the blinding light of the Moon, and look instead at its dark side.

* The first words uttered by Aldrin when he stepped on the Moon.